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TRANSMITTAL FORM

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		Application Number	09/707,737
		Filing Date	November 6, 2000
		First Named Inventor	Stepen R. Quake
		Art Unit	1655
		Examiner Name	Arun K. Chakrabarti
Total Number of Pages in This Submission		Attorney Docket Number	20174C-001810US

ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
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<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Status Letter
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<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Request for Refund	Return Postcard, copies of one-hundred and ninety-seven (197) cited references
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<input type="checkbox"/> Response to Missing Parts/ Incomplete Application		
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		
Remarks		The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual	Townsend and Townsend and Crew LLP Scott L. Ausenhus	
Signature		
Date	Reg. No. 42,271 September 9, 2003	

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Attorney Docket No.: 20174C-001810US

Commissioner for Patents
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Alexandria, VA 22313-1450

On SEPT 9, 2003

TOWNSEND and TOWNSEND and CREW LLP

By: 
Nicole M. Burke

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Stephen Quake

Application No.: 09/707,737

Filed: November 6, 2000

For: METHODS AND APPARATUSES
FOR ANALYZING
POLYNUCLEOTIDE SEQUENCES

Examiner: Arun K. Chakrabarti

Art Unit: 1655

**SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER 37
CFR §1.97 and §1.98**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no

representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

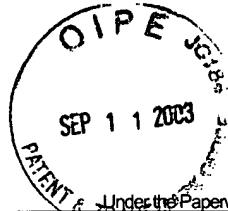
Respectfully submitted,



Scott L. Ausenhus
Reg. No. 42,271

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Art Unit	1655
Examiner Name	Arun K. Chakrabarti
Attorney Docket Number	20174C-001810US

U.S. PATENT DOCUMENTS

Examiner	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	US-4,119,368	10/10/1978	Yamakazi	
	A2	US-4,344,064	08/10/1982	Bitler et al.	
	A3	US-4,707,237	11/17/1987	Lepp et al.	
	A4	US-4,793,705	12/27/1988	Shera	
	A5	US-4,971,903	11/20/1990	Hyman	
	A6	US-4,979,824	12/25/1990	Mathies et al.	
	A7	US-4,994,373	02/19/1991	Stavrianopoulos	
	A8	US-5,085,562	02/04/1992	Van Lintel	
	A9	US-5,091,652	02/25/1992	Mathies et al.	
	A10	US-5,096,388	03/17/1992	Weinberg	
	A11	US-5,143,854	09/01/1992	Pirrung et al.	
	A12	US-5,171,132	12/15/1992	Miyazaki	
	A13	US-5,224,843	07/06/1993	Van Lintel	
	A14	US-5,242,797	09/07/1993	Hirschfeld	
	A15	US-5,259,737	11/09/1993	Kamisuki et al.	
	A16	US-5,302,509	04/12/1994	Cheeseman	
	A17	US-5,304,487	04/19/1994	Wilding et al.	
	A18	US-5,336,062	08/09/1994	Richter	
	A19	US-5,375,979	12/27/1994	Trah	
	A20	US-5,376,252	12/27/1994	Ekstrom	
	A21	US-5,405,747	04/11/1995	Jett et al.	
	A22	US-5,424,186	06/13/1995	Fodor et al.	
	A23	US-5,529,465	06/25/1996	Zengerle et al.	
	A24	US-5,599,695	02/04/1997	Pease et al.	
	A25	US-5,705,018	01/06/1998	Hartley	
	A26	US-5,776,782	07/07/1998	Tsuji	
	A27	US-5,831,070	11/03/1998	Pease et al.	
	A28	US-5,832,165	11/03/1998	Reichert et al.	
	A29	US-5,836,750	11/17/1998	Cabuz	
	A30	US-5,846,396	12/08/1998	Zanzucchi et al.	
	A31	US-5,861,287	01/19/1999	Metzker et al.	
	A32	US-5,908,755	06/01/1999	Kumar et al.	
	A33	US-5,945,283	08/31/1999	Kwok et al.	
	A34	US-5,959,781	09/28/1999	Kintz et al.	

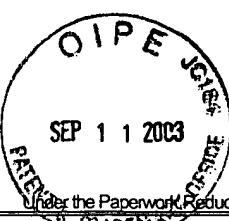
Examiner Signature	Date Considered
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Application Number	09/707,737
Filing Date	November 6, 2000
First Named Inventor	
Art Unit	1655
Examiner Name	Arun K. Chakrabarti
Attorney Docket Number	20174C-001810US

U.S. PATENT DOCUMENTS

Examiner	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A35	US-5,908,755	06/01/1999	Kumar et al.	
	A36	US-5,945,283	08/31/1999	Kwok et al.	
	A37	US-5,959,781	09/28/1999	Kintz et al.	
	A38	US-5,965,446	10/12/1999	Ishikawa, Mitsu	
	A39	US-6,007,309	12/28/1999	Hartley	
	A40	US-6,020,457	02/01/2000	Klimash et al.	
	A41	US-6,043,080	03/28/2000	Lipshutz et al.	
	A42	US-6,094,274	06/25/2000	Yokoi	
	A43	US-6,107,044	08/22/2000	Nikiforov	
	A44	US-6,132,580	10/17/2000	Mathies et al.	
	A45	US-6,136,212	10/24/2000	Mastrangelo et al.	
	A46	US-6,177,249 B1	01/23/2001	Kwok et al.	
	A47	US-6,210,896 B1	04/03/2001	Chan	
	A48	US-6,221,592 B1	04/24/2001	Schwartz et al.	
	A49	US-6,255,083 B1	07/03/2001	Williams	
	A50	US-6,263,286 B1	07/17/2001	Gilmanshin et al.	
	A51	US-6,344,325 B1	02/05/2002	Quake et al.	
	A52	US-6,355,420 B1	03/12/2002	Chan	
	A53	US-6,361,671 B1	03/26/2002	Mathies et al.	
	A54	US-6,403,311 B1	06/11/2002	Chan	
	A55	US-2003-0022207	01/30/2003	Balasubramanian et al.	
	A56	US-2003-0064398	04/03/2003	Barnes	

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FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴ Kind Code ⁵ (if known)				
	B1	EPO	EP 0 579 997 A1	01/26/1994			<input type="checkbox"/>
	B2	EPO	EP 0 703 364 A1	03/27/1996			<input type="checkbox"/>
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		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
B34	PCT	WO 01/42496	A2		06/14/2001			<input type="checkbox"/>
B35	PCT	WO 01/57248	A2		08/09/2001			<input type="checkbox"/>
B36	PCT	WO 01/57249	A1		08/09/2001			<input type="checkbox"/>
B37	PCT	WO 02/00343	A2		01/03/2002			<input type="checkbox"/>
B38	PCT	WO 02/29106	A2		04/11/2002			<input type="checkbox"/>
B39	PCT	WO 02/30486	A2		04/18/2002			<input type="checkbox"/>
B40	PCT	WO 02/061126	A2		08/08/2002			<input type="checkbox"/>
B41	PCT	WO 02/061127	A2		08/08/2002			<input type="checkbox"/>
B42	PCT	WO 03/016565	A2		02/27/2003			

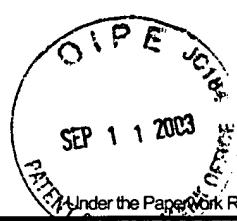
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Examiner Name	Arun K. Chakrabarti

Attorney Docket Number 20174C-001810US

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C1	ADAM, DAVID "Individual genomes targeted in sequencing revolution", Nature, 2001, p.402, Vol. 411.	
	C2	AMBROSE, W.P. et al. "Single-Molecule Detection With Total Internal Reflection Excitation: Comparing Signal-to-Background and Total Signals in Different Geometries" Cytometry, 1999, p. 224-231, Vol. 36.	
	C3	ARNDT-JOVIN et al. "Immunofluorescence Localization of Z-DNA in Chromosomes: Quantitation by Scanning Microphotometry and Computer-assisted Image Analysis" Journal of Cell Biology, October 1985, pp. 1422-1433, Vol. 101.	
	C4	AXELROD et al. "Total internal reflection fluorescent microscopy", Journal of Microscopy, January 1983, pp. 19-28, Vol. 129, Part 1.	
	C5	AXELROD, DANIEL "Cell-Substrate Contacts Illuminated by Total Internal Reflection Fluorescence" Journal of Cell Biology, April 1981, pp. 141-145, Vol. 89	
	C6	BASCHÉ et al. Chapter 2: "Near-field Optical Imaging and Spectroscopy of Single Molecules" and Chapter 3: "Single-Molecule Detection in Analytical Chemistry", <u>Single Molecule Optical Detection, Imaging, and Spectroscopy</u> , 1997, Published by Weinheim:VCM, Germany.	
	C7	BRASLAVSKY et al. "Objective-type dark-field illumination for scattering from microbeads", Applied Optics, November 2001, p. 5650-5657, Vol. 40, No. 31	
	C8	BRASLAVSKY et al.; "Single Molecule Measurements of DNA Polymerase Activity: A Step Towards Single Molecule Sequencing", Biophysics Journal Abstracts Issue, 2002, p. 507A	
	C9	BRECHTEL et al.; "Control of the electroosmotic flow by metal-salt-containing buffers", J Chromatography A, 1995, pp. 97-105, Vol. 716	
	C10	BRYZEK et al.; "Micromachines on the March", IEEE Spectrum, 1994, pp. 20-31, Vol. 31, No. 5	
	C11	BUCHAILLOT et al.; "Silicon nitride thin films Young's modulus determination by an optical non-destructive method", Jpn. J Appl Phys, 1995, pp. L794-L797, Vol. 36, No. 2:6B	
	C12	BURGHARDT et al. "Total Interanl Reflection/Fluorescence Photobleaching Recovery Study of Serum Albumin Adsorption Dynamics" Biophys. Journal, March 1981, pp. 455-468, Vol. 33	
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First Named Inventor			
Art Unit	1655		
Examiner Name	Arun K. Chakrabarti		
Attorney Docket Number	20174C-001810US		

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NON PATENT LITERATURE DOCUMENTS

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	C15	CHIU et al.; "Patterned Deposition of Cells and Proteins onto Surfaces by Using Three-Dimensional Microfluidic Systems", Proc. Natl. Acad. Sci., 2000, pp. 2408-2413, Vol. 97, No. 6	
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Substitute for form 1449/PTO

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(use as many sheets as necessary)

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Complete if Known

Application Number	09/707,737
Filing Date	November 6, 2000
First Named Inventor	
Art Unit	1655
Examiner Name	Arun K. Chakrabarti
Attorney Docket Number	20174C-001810US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C95	YANG et al. "A Mems Thermopneumatic Silicone Membrane Valve", Proceedings of IEEE 10th Annual International Workshop on MicroElectro Mechanical Systems, Sensors and Actuators, 1998, A64(1):101-108.	
	C96	YAZDI et al. "Micromachined Inertial Sensors," Proceedings of IEEE, 1998, 86(8):1640-1659.	
	C97	YERSHOV et al. "DNA analysis and diagnostics on oligonucleotide microchips", Proc. National Academy of Science, May 1996, p. 4913-4918, Vol. 93, U.S.A.	
	C98	YOUNG et al. "Contoured elastic-membrane microvalves for microfluidic network integration," J. Biomechanical Engineering, 1999, 121:2-6.	
	C99	ZDEBLICK et al. "A Microminiature Electric-to-Fluidic Valve", <i>Transducers '87, The 4th International Conference on Solid-State Sensors and Actuators</i> . Reprinted in <u>Micromechanics and MEMS Classic and Seminal Papers to 1990</u> , 1997, IEEE Press, USA.	
	C100		

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